

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 25, 2011 has been entered.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1-5 and 9-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, lines 14-19, the phrase “wherein the dispersion stabilizer comprises ----- ----- the tin-doped indium oxide fine particles” renders claims indefinite since the dispersion stabilizer does not contain tin-doped indium oxide fine particles. Therefore it is not clear from the claim language how to make the claimed dispersion stabilizer.

Lines 14 and 20-23, the composition of claimed dispersion of tin-doped indium oxide fine particles, wherein “the content of the dispersion stabilizer is from 6% to 20.7% by weight (line 14),

the content of the tin-doped indium oxide fine particles is from 10% to 60% by weight (lines 20-21),

the content of the alcohol is from 4 to 13.8% by weight (line 22), and

the content of the plasticizer is from 10% to 80% by weight (line 23)" renders claim indefinite in absence of providing a base for calculation.

The phrase "tin-doped indium oxide fine particles" in claims 1-5, 9, 10, and 13-30 renders claims indefinite. Which particles of "tin-doped indium oxide" are considered as fine particles? What is fine?

Claim 5, lines 3-4, the phrase "the dispersion stabilizer contains at least one atom selected from the group consisting of nitrogen, phosphorus, and chalcogen" renders claim indefinite because it is not clear from the claim language the nitrogen containing compound.

Claim 9, line 3, the phrase "content of the plasticizer for an interlayer film is from 1 to 99.9% by weight" renders claim confusing since claim 9 depends from claim 1 which requires "plasticizer for an interlayer film from 10% to 80% by weight",

Lines 4-5, the phrase "the organic solvent containing at least one alcohol as a main component is from 0.02 to 25% by weight" renders claim 9 indefinite since claim 9 depends from claim 1 which requires "an organic solvent containing at least one alcohol as a main component is from 4 to 13.8% by weight.

Claim 10, lines 6-7, the phrase "a concentration of the tin-doped indium oxide fine particles is from 0.1 to 95% by weight" renders claim indefinite since claim 10

depends from claim 1 which requires concentration of the tin-doped indium oxide fine particles from 10% to 60% By weight.

Claim 11, lines 3-5, the phrase “when a concentration of ----- fine particles of 10% by weight” renders claim indefinite. How one can adjust concentration of the tin-doped indium oxide particles to 10.0% by weight by diluting a dispersion of tin-doped indium oxide fine particles having the concentration of the tin-doped indium oxide fine particles of 10% by weight?

Lines 5-8, the phrase “when a concentration of ----- fine particles of 40% by weight” renders claim indefinite. How one can adjust concentration of the tin-doped indium oxide particles to 40.0% by weight by diluting a dispersion of tin-doped indium oxide fine particles having the concentration of the tin-doped indium oxide fine particles of 40% by weight?,

Line 9, the phrase “a mean volume particle size of the tin-doped indium oxide fine particle is 80 nm” renders claim indefinite. Changing the phrase “80 nm” to the phrase -- 80 nm³ -- may overcome the rejection, and

Line 11, the phrase “particle size at 90% accumulation (D90) is 160 nm” renders claim indefinites since it is not clear whether applicants are trying to claim a volume particle size accumulation or something else. Clarification and/or correction requested.

Claim 14, lines 7-12, the phrase “wherein the dispersion stabilizer comprises ----- the tin-doped indium oxide fine particles” renders claims indefinite since the dispersion stabilizer does not contain tin-doped indium oxide fine particles. Therefore it is not clear from the claim language how to make the claimed dispersion stabilizer.

Lines 7 and 13-16, the composition of claimed dispersion of tin-doped indium oxide fine particles, wherein “the content of the dispersion stabilizer is from 6% to 20.7% by weight (line 7),

the content of the tin-doped indium oxide fine particles is from 10% to 60% by weight (lines 13-14),

the content of the alcohol is from 4 to 13.8% by weight (line 15), and

the content of the plasticizer is from 10% to 80% by weight (line 16)” renders claim indefinite in absence of providing a base for calculation.

Claim 27, lines 14-23, the phrase “the content of the tin-doped ----- 80% by weight, respectively” renders claims indefinite in absence of providing a base for calculation.

4. Claims 1-5 and 9-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kondo (U. S. Patent 6,329,061 B2) in view of Kobata et al (U. S. Patent 6,673,456 B1) and Mont et al (U. S. Patent 4,027,069) for the reasons of record set forth in paragraph 4 of the Office Action mailed April 23, 2010 (Paper Number 20100420).

5. Applicant's arguments filed July 25, 2011 have been fully considered but they are not persuasive. In reference to rejection of claims 1-5 and 9-30 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, applicants arguments mainly directed to amended claims.

These arguments are unpersuasive because the claims as amended are also indefinite as stated above in the paragraph 3.

In reference to rejection of claims 1-5 and 9-30 under 35 U.S.C. 103(a) as being unpatentable over Kondo (U. S. Patent 6,329,061 B2) in view of Kobata et al (U. S. Patent 6,673,456 B1) and Mont et al (U. S. Patent 4,027,069), applicants essentially argue that among Kobata et al, Kondo, and Mont et al, only Kondo discloses the use of alcohol; however, in Kondo, there is no description with regard to the content of alcohol and its effect. The dispersion of tin-doped indium oxide fine particles as claimed requires from 4 to 13.8% by weight alcohol which is not taught in the prior art.

These arguments are unpersuasive because there is no criticality of claimed amount of alcohol is established. In absence of establishing criticality of claimed amount of alcohol, a person of ordinary skill in the art would have found it obvious to optimize amount of alcohol required for dissolving polyvinyl butyral resin in the concentrated dispersion of tin-doped indium oxide particles disclosed by Kondo and Kobata et al. Furthermore, the final interlayer and/or glass laminate with the interlayer does not have presence of claimed amount of alcohol.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dhirajlal S. Nakarani whose telephone number is (571)272-1512. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie E. Shosho can be reached on (571) 272-1123. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

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**/D. S. Nakarani/
Primary Examiner, Art Unit 1787**

DSN
August 27, 2011.